



hp StorageWorks performance advisor xp 2.0

Configuration

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Topic	Limiting the amount of disk array history records per transfer from the web server
File	... \hpss\pa\properties\serverparameters.properties
When Read	This parameter is read the first time an applet requests a range of disk array data to scroll through.
Discussion	This limits the amount of records the web server can send to the client to prevent a large amount of data from being dragged across the network at one time. To view a large amount of records, manually adjust the begin and end times on the web browser, and then request the records from the web server.
Entry	The following is used to keep an XML data request that covers a large amount of time and, therefore, data records from tying up a servlet with a large transfer and even causing out-of-memory errors. The client can make requests for more data because it has a count of records that are available and can specify which record to start with for the next transfer. DiskArrayPerfHistoryMaxRecordTransfer=1000

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Topic	Database backup, restore, and reset
Files	... \Hpss\padb\tools DBBackup ... \Hpss\padb\tools DBRestore
When Accessed	Whenever it becomes necessary to perform a database backup, restore, or reset of Performance Advisor XP.

Discussion	<p>Database Backup, Restore, and Reset</p> <p>You might need to perform a database backup, restore, or reset of Performance Advisor XP. To do so, you must be at the management station.</p> <p>Database Backup</p> <p>At the command line prompt, type <code>cd ... \Hpss\padb\tools</code>. In the Tools directory, type <code>DBBackup <date or other defining parameter></code>. For the defining parameter, it is recommended that you provide a date. For example, if you type <code>DBBackup 09112004</code>, the system will provide a backup of all data into a directory named 09112004.</p> <p>Database Restore</p> <p>At the command prompt, type <code>cd ... \Hpss\padb\tools</code>. In the Tools directory, type <code>DBRestore <date or other defining parameter></code>. Enter the same parameter that you typed at the command line prompt for the database backup. For example, if you typed <code>DBBackup 09112004</code> to back up your data, you would then need to type <code>DBRestore 09112004</code> to restore the data from the backup contained in the 09112004 directory.</p> <p>Database Reset</p> <p>At the command line prompt, type <code>cd ... \Hpss\padb\tools</code>. In the Tools directory, type <code>DBRestore backup</code>.</p>
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Topic	Configuring the alarm dispatch engine on the web server
File	... \hpss\pa\properties\serverparameters.properties
When Read	These parameters are read whenever an alarm dispatch engine is started. An alarm dispatch engine is comprised of various threads, and it is attached to a servlet. The servlet alarm tallies can be viewed in a web browser at <code>http://<servername>/servlet/com.hp.xpsl.alarms.AlarmDispatchServlet</code> . This is being mentioned here as a convenience and is not supported since its purpose is for development and debugging. The fields presented to the web browser are used in the dispatch engine's bookkeeping and do not necessarily correspond to alarms that are sent to a particular destination. Nevertheless, it does serve as a window for monitoring and general status purposes. See the Event History window for a more useful display. Send suggestions on how you would like to see this feature improved to better serve your needs.
Discussion	Only the first two parameters are relevant to customer-site usage. The two default timeout values are greater than the normal error-sensing time that is actually necessary. These values are used to determine how long to wait on the dispatch courier's thread before stopping the thread. This prevents the alarm dispatch engine from locking up on an errant send request.
Entry	<p>The following is the amount of time in milliseconds to wait for an SMTP request to complete.</p> <p>Email_TimeOut=30000</p> <p>The following determines if real or fake data is used for alarms.</p> <p>1 -> use database data; 0 -> use fake data</p> <p>Listen_To_Database=1</p> <p>The following determines how long to sleep between sending groups of fake data.</p> <p>This is only active when not listening to the database. Units are milliseconds.</p> <p>Fake_Data_Sleep=120000</p> <p>The following is the email address separated by spaces.</p> <p>Fake_Email_Recipients=Some Person@hp.com</p>

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Topic	Configuring the e-mail (SMTP) courier on the web server
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File	... \hpss\pa\properties\serverparameters.properties
When Read	Each time an alarm is produced that has at least one e-mail recipient.
Discussion	<p>The first two fields are used to establish a connection with the SMTP server. You must supply the SMTP servers your web server can talk to. Changing the "from" field is advisable for readability purposes, especially if the SMTP server checks for a valid sender. This is not to be used to spam people. Change the subject line and the definable message fields as desired. These areas are especially useful for adding phrases for your particular locale, explaining what a message means, or receiving the message into a program that parses the main body of the message and performs some automated processing. Currently there are no levels of alarm severity for e-mail messages.</p>
Entry	<p>The following line is used to specify where the SMTP server(s) are located.</p> <p>A server is specified by its name followed by its port. There can be an arbitrary amount of these pairs to try. They are used in the order that they appear here. An even number of space-delimited tokens are required in this string. An example is smtpserver.company.com 25 alternatesmtp.nonprofit.org 25</p> <p>If you cannot ping it, the code cannot talk to it!</p> <p>Add more pairs of servers and ports to achieve retries.</p> <p>SMTP_Servers_And_Ports=server.domain1.company.com 25 server.domain2.company.com 25 server.domain3.company.com 25</p> <p>The following entry specifies who the e-mail is said to be coming from:</p> <p>SMTP_Mail_From=alarm_server@your_company.com</p> <p>The following entry is used for the subject field of the e-mail. This can have spaces.</p> <p>SMTP_Subject=XP Alarm</p> <p>The following are the fixed and user-defined messages for the alarm descriptions.</p> <p>CHIP_PCB_MP_Util_Fixed=Client/Host Interface Processor Utilization</p> <p>CHIP_PCB_MP_Util_User=Front (Host) End Processor Utilization</p> <p>LDEV_Sequential_Reads_Fixed=Logical Device Sequential Reads</p> <p>LDEV_Sequential_Reads_User=Drive partition Sequential Reads</p> <p>LDEV_Sequential_Writes_Fixed=Logical Device Sequential Writes</p> <p>LDEV_Sequential_Writes_User=Drive partition Sequential Writes</p> <p>LDEV_Random_Reads_Fixed=Logical Device Random Reads</p> <p>LDEV_Random_Reads_User=Drive partition Random Reads</p> <p>LDEV_Random_Writes_Fixed=Logical Device Random Writes</p> <p>LDEV_Random_Writes_User=Drive partition Random Writes</p> <p>LDEV_Sequential_I_O_rates_Fixed=Logical Device Sequential Input/Output</p> <p>LDEV_Sequential_I_O_rates_User=Drive partition Sequential I/O</p> <p>LDEV_Random_I_O_rates_Fixed=Logical Device Random Input/Output</p> <p>LDEV_Random_I_O_rates_User=Drive partition Random I/O</p> <p>ACP_PAIR_Utilization_Fixed=Array Control Processor Utilization</p> <p>ACP_PAIR_Utilization_User=Back (Disk) End Processor Utilization</p>
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Topic	Formatting and content of SNMP trap messages sent by PA XP
File	... \hpss\pa\properties\serverparameters.properties

Discussion

The message is of type SNMPv1. It has the following format and content:

PDU version -- 0 (indicates type SNMPv1)

Community -- public

Message type -- 0xa4 (indicates a trap message)

Enterprise -- The vendor identification (OID).

Agent-Address -- The IP address of the management station where the trap is generated.

Generic Trap Type -- 6 (enterprise-specific)

Specific Trap Type -- 4 (indicates a notice event)

Timestamp -- 0 (not used)

Variable bindings -- This field consists of a sequence of (oid/name=value) pairs. The content is the same as the message that is sent by e-mail.

The following is the format of the pair:

<Enterprise>.1 Server=<Host name of the management station>

<Enterprise>.2 Sequence_Number=<Sequence number in Event History>

<Enterprise>.3 Alarm_Source=1

<Enterprise>.4 Alarm_Major_Type=<Major type of the alarm event>

<Enterprise>.5 Alarm_Minor_Type=<Minor type of the alarm event>

<Enterprise>.6 Specific_Item=<Procedure name of the alarm event>

<Enterprise>.7 Array_ID=<Array ID of the alarm event>

<Enterprise>.8 Array_Type=<Array type of the alarm event>

<Enterprise>.9 Maximum_Threshold=<The maximum value of this trigger event>

<Enterprise>.10 Actual_Value=<The actual value when this event is triggered>

<Enterprise>.11 Time_Posted=<Time this event is triggered>

<Enterprise>.12 Time_Updated=<Time this event is updated>

The value of the Enterprise is defined in the serverparameter.properties file.

The key is SNMP_Enterprise.

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Topic	Configuring the host agent: ManagementStation.Hostname
File	On Windows platforms: C:\Program Files\Hewlett-Packard\sanmgr\hostagent\config\paxp_service.properties On UNIX platforms: /opt/sanmgr/hostagent/config/paxp_service.properties
When Read	This parameter is read when the host agent is started. The host station normally executes as a service under Microsoft Windows or as a daemon under UNIX.
Discussion	IP address or fully-qualified network name of management station. Note: This host agent is configured automatically during host agent installation. Configure this host agent manually only when you want to change the management station after installing the host agent.

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Topic	Configuring the host agent: ManagementStation.PollIntervalMilliseconds
File	On Windows platforms: C:\Program Files\Hewlett-Packard\sanmgr\hostagent\config\paxp_service.properties On UNIX platforms: /opt/sanmgr/hostagent/config/paxp_service.properties
When Read	This parameter is read specified at run time.
Discussion	The frequency at which the Host station polls the Management station for updates. The default for the polling cycle is 60000 (60 seconds).
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Topic	Configuring the password required to access PA XP
Discussion	Note: The user can change user/administrator passwords through the GUI.
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Topic	Expanding the database size to retain up to 32 GB of data
Discussion	Note: The user can change the database size through the GUI.
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